

Appendix G



Meghan Carfiori/National Park Service

Monarch butterfly

Finding of No Significant Impact (FONSI)

Finding of No Significant Impact Presquile National Wildlife Refuge Comprehensive Conservation Plan

In August 2012, the U.S. Fish and Wildlife Service (Service, we, our) published the draft Comprehensive Conservation Plan and the Environmental Assessment (CCP/EA) for Presquile National Wildlife Refuge (Presquile NWR, the refuge). The 1,329-acre Presquile NWR is an island in the James River near Hopewell, Virginia, 20 miles southeast of Richmond. It was established in 1953 as “an inviolate sanctuary, or for any other management purpose, for migratory birds.” It is one of many important migratory bird stopover sites along the Atlantic Flyway and provides protected breeding habitat for Federal and State-listed threatened and endangered species, as well as many neotropical migrant bird species. The refuge is comprised of a variety of wildlife habitats, including the open waters of the James River, tidal swamp forest, tidal freshwater marshes, grasslands, mixed mesic forest, and river escarpment. It is one of four refuges that make up the Eastern Virginia Rivers NWR Complex.

Chapter 1 of the draft CCP/EA identifies the purpose of, and need for, a CCP and summarizes the laws, policies, and other mandates we follow in developing the plan. It describes international, national, and regional conservation plans that were used as references, and defines our project analysis area. Chapter 1 also presents the refuge’s purposes, and describes the vision and goals we set for the refuge over the next 15 years. Finally, chapter 1 describes the planning process, including public and partner involvement, and the issues and concerns that are addressed in the plan. Chapter 2 describes the current physical, biological, and socioeconomic environments of the refuge, as well as its surroundings. Chapter 3 describes two proposed management alternatives for the refuge. The alternatives include a detailed description of their respective objectives and strategies designed to help achieve refuge purposes, vision, and goals, and contribute to the mission of the National Wildlife Refuge System (Refuge System). We identified alternative B as the Service-preferred alternative. Chapter 4 carefully considers and evaluates each alternative’s direct, indirect, and cumulative impacts on the environment. Chapter 5 includes a listing of who we consulted and coordinated with during development of the plan, and includes a list of document preparers.

The draft plan’s five appendixes provide additional information supporting the assessment and specific proposals in the Service-preferred alternative. A brief overview of each alternative follows.

Management Alternatives

Alternative A (Current Management): Alternative A satisfies the National Environmental Policy Act of 1969 (NEPA) requirement of a “no action” alternative, which we define as “continuing current management.” It describes our existing management priorities and activities for Presquile NWR, and serves as a baseline for comparing and contrasting alternative B.

We would continue to protect tidal swamp forest and marsh habitats for priority refuge resources of concern, such as the bald eagle, prothonotary warbler, American black duck and other waterfowl, and the federally threatened sensitive joint-vetch. For aquatic resources, we would continue to improve riparian habitat, work with James River Association (JRA) on water quality monitoring, and support efforts by Virginia Commonwealth University (VCU), our Virginia Fisheries Coordinator’s Office, and other partners to restore sustainable, healthy populations of the federally endangered Atlantic sturgeon. We would continue to maintain approximately 200 acres of grassland habitat for breeding and migrating songbirds, as well as continue planting native trees along the southwest border of the refuge and controlling invasive species.

We would continue to protect known cultural resources from degradation from public use, natural processes, and refuge management actions on a limited, as-needed basis.

Our environmental education program would continue to be a combination of on- and off-refuge efforts. We would continue to provide programs for teachers and students and work with local groups. We would continue to work closely with JRA to provide on-refuge environmental education programs for up to 120 students annually. We would also continue to seek opportunities both on and off the refuge where we could promote our environmental education program.

We would continue to support wildlife-dependent recreation on the refuge in designated areas and use a permit system for any visitors not involved with a refuge-sponsored event. Self-guided wildlife observation and photography would continue under that permit system. Our interpretive programs would include conducting several pontoon boat tours around the refuge each year, holding volunteer events, and working with individual groups to provide interpretive programming on a case-by-case basis. We would continue to participate in interpretive events off-refuge in cooperation with partners and local groups, and participate in several civic events each year. We would continue to offer a 3-day fall deer hunt, and the refuge would continue to be closed to waterfowl hunting and fishing.

Alternative B (Habitat Diversity and Focal Species Emphasis): Alternative B is the Service-preferred alternative. It combines the actions we believe would best achieve the refuge's purposes, vision, and goals, and respond to public issues. Under alternative B, we would emphasize the management of specific refuge habitats to support priority species whose habitat needs would benefit other species of conservation concern that are found in the area. Species of conservation concern include migrating waterfowl, waterbirds, and forest-dependent birds, the federally endangered Atlantic sturgeon, and the federally threatened sensitive joint-vetch. We would emphasize maintaining and restoring the integrity of tidal freshwater marsh, tidal swamp forest, the James River and associated backwater habitats, and mature mixed mesic forest habitats through increased monitoring and data collection, and a more aggressive response to habitat changes associated with invasive species, global climate change, or storm events. We would also convert 200 acres of grassland habitat to transitional mixed mesic forest habitat.

We would continue to protect known cultural resources from degradation from public use, natural processes, and refuge management actions through increased efforts to consult with others, including the State Historic Preservation Office (SHPO).

We would continue to support wildlife-dependent recreation on the refuge in designated areas and use a permit system for any visitors not involved with a refuge-sponsored event. This alternative would enhance our visitor services programs by improving opportunities for environmental education and wildlife-dependent recreation. The improvements would include expanding the on-refuge environmental education program through a partnership with JRA and other State and local educators to serve up to 2,000 students annually, building additional partnerships to support increased off-refuge education and interpretive opportunities, and enhancing the quality of our interpretive materials. We would also evaluate opportunities to expand the hunting program to include turkey hunting, a 5-day hunt for deer, and deer or turkey hunting opportunities for youth. The refuge would continue to be closed to waterfowl hunting and fishing. We would also expand our conservation, research, monitoring, and management partnerships to help restore and conserve the refuge.

Selection of Management Alternative for the Final CCP

We distributed the draft CCP/EA for a 37-day period of public review and comment from August 2, 2012, to September 7, 2012. We received 19 written responses representing individuals, organizations, and Federal, State, and local government agencies. Appendix F in the final CCP includes a summary of those comments and our responses to them. After reviewing the proposed management actions, and considering all public comments and our responses to them, we have determined that the analysis in the EA is sufficient to support our findings. We are selecting alternative B, with minor modifications to what was presented in the draft CCP/EA, to implement as the final CCP. Those minor modifications include updating information, making factual corrections that do not alter the conclusions drawn from their analysis, and fixing typographical errors.

We concur that alternative B, with the above changes, and in comparison to the other alternatives, will best:

- Fulfill the mission of the Refuge System.
- Achieve the refuge's purposes, visions, and goals.
- Maintain and, where appropriate, restore the refuge's ecological integrity.
- Address the major issues identified during the planning process.
- Ensure consistency with the principles of sound fish and wildlife management.

Specifically, in comparison to alternative A, alternative B provides the best balance in sustaining or improving the biological integrity, diversity, and environmental health of the refuge in support of Service policy (601 FW 3). These environmental conditions will be enhanced through restoration of native vegetation (e.g., native tree plantings); increased control of invasive plants, allowing poor quality grasslands to succeed to forest, thereby reducing forest fragmentation and creating more interior forest; and working with partners to investigate options for reducing shoreline erosion and sediment deposition in the James River. In addition, increased inventories and monitoring will ensure our management actions are achieving the desired results, including the protection of the federally listed sensitive joint-vetch and Atlantic sturgeon.

Under alternative B, we would increase our efforts to protect cultural resources on the refuge and expand our understanding of the refuge's role in the area's cultural history. We would actively pursue partnership opportunities to improve and promote understanding of Virginia's human history.

Finally, alternative B also offers the best opportunity to enhance and expand recreational opportunities, while still maintaining a diversity of habitats and protecting sensitive wildlife areas from disturbance. Alternative B would expand the refuge's existing environmental education program through our formal partnership with JRA, and expanded partnerships with other State and local educators, to bring an increased number of students to the refuge for environmental education programs. We would promote off-refuge environmental education programs and increase the refuge interpretive program. We would explore the potential to expand our hunt program to include a turkey hunt and deer and/or turkey hunting opportunities for youth hunters.

We have reviewed the predicted beneficial and adverse impacts associated with alternative B that are presented in chapter 4 of the draft CCP/EA, and compared them to the other alternative. We specifically reviewed the context and intensity of those predicted impacts over the short and long term, and considered cumulative effects. Impacts to natural and cultural resources, refuge visitors, and the socioeconomic environment in the refuge vicinity would generally be positive or result in negligible adverse impacts over the long term. Our review of each of the NEPA factors to consider in assessing whether there will be significant environmental effects is summarized here (40 C.F.R. 1508.27).

Beneficial and adverse effects—We expect implementation of management actions detailed in the final CCP will result in beneficial effects and some adverse effects on the natural and human environment as follows.

We anticipate moderate beneficial effects would result from:

- Improved biological integrity, diversity, and environmental health from controlling invasive species, maintaining and restoring refuge tidal freshwater marsh and tidal swamp forest, protecting the refuge shoreline, and expanding mature forest habitat.
- Increased inventorying and monitoring of habitats and species through partnerships with other government agencies, organizations, and academic institutions in order to better inform refuge management strategies.
- Conservation of rare, threatened, and endangered species including the federally endangered Atlantic sturgeon and the federally threatened sensitive joint-vetch.
- Conversion of approximately 200 acres of grassland habitat to mature mixed mesic forest. The transitional habitat that would occur on those acres over the next 10 to 15 years would benefit migratory bird species of conservation concern, such as American woodcock, northern bobwhite, prairie warbler, and field sparrow.
- Enhanced understanding and protection of refuge cultural and historical resources through more effective educational and interpretive programs.
- Expanded, high quality public use opportunities.

We anticipate minor adverse effects from habitat management activities, maintenance of buildings and public use facilities, and from visitors engaged in wildlife-dependent recreation. Most of these effects would be incremental in their impacts, are temporary or short term, and do not represent any major changes to current management. To reduce the likelihood of causing adverse impacts, we would:

Monitor impacts resulting from implementation of the CCP and use adaptive management to adjust management techniques, reevaluate, or refine our habitat management objectives as needed.

- Allow only compatible and appropriate public uses and limit visitors to designated areas and trails.
- Use energy-efficient practices and vehicles, whenever possible.
- Use best management practices for habitat management and the construction and maintenance of facilities.

Given these considerations, there should be no significant impacts on the natural and human environment from the implementation of the final CCP.

Public health and safety—We expect the refuge's good safety record to continue under the final CCP. Public health and safety is a paramount consideration in designing and implementing all activities on the refuge, whether those activities support habitat or visitor services programs. Adherence to spill prevention plans, pesticide use plans, best management practices, and the protective actions provided in the stipulations of the compatibility determinations for authorized public uses on the refuge, will be a priority. Given these considerations, there should be no significant impact on public health and safety from the implementation of the final CCP.

Unique characteristics of the area—We expect the unique and regionally significant character of the refuge to be maintained under implementation of the final CCP. The unique characteristics of the refuge include the following:

- It is located within and adjacent to coastal counties with special preservation provisions to protect water quality in accordance with the Chesapeake Bay Preservation Act.
- It is located within the Chesapeake Bay Estuarine Complex, a Ramsar wetland of international importance.
- Its 189 acres of tidal freshwater marsh is considered a significant natural vegetation community by the Virginia Natural Heritage Program because of its size and the presence of special status plant species, such as the federally threatened sensitive joint-vetch.
- It is located within a segment of the lower James River that has the potential to be designated as a Virginia Scenic River in the future.
- It is located within an Anadromous Fish Use Area.
- It is located along a segment of the James River that is one of the best places in the Chesapeake Bay Estuary to find the federally endangered Atlantic sturgeon.
- It is an important resting and feeding area for thousands of migrating and wintering waterfowl.
- It is located within the Lower James River Important Bird Area.
- It is located within the summer and winter concentration areas for bald eagles along the James River watershed.

- It has a high potential for preserved significant archaeological resources that date from the Late Archaic period (3,000 to 1,200 B.C.) through the 20th century and could enhance our understanding of Virginia's human history.
- It includes areas that exemplify indigenous cultural landscapes and cultural landscapes that are evocative of early European settlement periods.

We expect that the management actions outlined in the final CCP will continue to protect these unique characteristics. These actions include the following:

- Restore, maintain, and manage forested, grassland, marsh, and aquatic habitats to benefit species of concern.
- Plant and maintain riparian areas and natural habitats.
- Restrict public access to designated areas.
- Work with partners to inventory and monitor habitats and species.
- Work with partners to protect, research, and interpret cultural resources and values.

Given these considerations, there should be no significant impact on the unique characteristics of the area due to implementation of the final CCP.

Highly controversial effects—We do not predict that any highly controversial effects would occur from implementing the final CCP. We have extensive experience protecting rare, threatened, and endangered species; conducting forest and grassland habitat management; controlling invasive plants and pests; controlling deer populations through hunting; and other activities to support wildlife-dependent recreational uses. The effects of these actions are widely known from our past management and monitoring. There is no scientific controversy over what these effects will be. Given these considerations, there is little risk of any unexpected, highly controversial effects on the quality of the human environment.

Highly uncertain effects or unknown risks—We do not predict any highly uncertain effects or unknown risks with implementing the final CCP. The management actions in the final CCP are mostly refinements of existing management that we have used since the refuge was established. However, there is some uncertainty with regard to how climate change will impact refuge resources.

There are many predictions of climate change impacts, but all have a degree of uncertainty. Generally, on a broad scale, it is predicted that the greatest effects of climate change will be on regional air and water temperatures, precipitation patterns, storm intensity, and sea levels, although the degree to which those changes will occur varies among climate change models. Those broad-scale changes are anticipated to influence natural disturbance patterns and result in a decrease in freeze periods, decreased snow cover, increased storm intensities and frequencies, increased intensity and frequency of summer droughts, damaging ozone, and an increase in the spread of invasive species and disease. The resulting effects on wildlife and habitats are expected to be variable and species-specific. There are no site-specific models for the refuge.

We feel the final CCP adheres to the main guiding principal of the Service's climate change adaptation planning which is to establish baseline conditions and monitor changes to those conditions, through the inventory and monitoring strategies we have identified, and by maintaining or increasing the resiliency of the refuge's habitats and ecological processes through forest, aquatic, and shoreline restoration activities. We are also safeguarding against the uncertainty and unpredictability of future climate change effects by using an adaptive management approach.

Despite the potential for some small amount of uncertainty from climate change impacts, we do not find a high degree of uncertainty or unknown risk that the final CCP will cause any significant direct, indirect, or cumulative impact on the environment. This conclusion is based on available data about the impacts of our current management actions, and our use of education, monitoring, expert consultations, outreach, and enforcement to help identify and address any unplanned effects.

Precedent for future actions with significant effects—We developed actions and strategies to support the purpose of the CCP, which is to develop a strategic management plan to best meet the refuge’s purposes and goals, and the Refuge System mission for up to 15 years. The effects of management are designed as gradual improvements over the existing conditions, not global or expansive changes. For example, strategies, such as controlling invasive plants, working with partners to improve water quality in the James River, and allowing natural succession on nearly 200 acres of grassland, provide small incremental gains with impacts that may take several years to realize any benefits. Given these considerations, we do not expect the actions in the final CCP to set a precedent for future actions that may cause any significant impact on the environment.

Cumulatively significant impacts—We do not predict that any cumulatively significant impacts would result from implementing the final CCP based on our NEPA analysis that accompanies the draft CCP/EA. However, since the CCP provides 15-year strategic direction for the refuge, there are actions that provide some cumulative benefits to the region when considered along with other past, present, or reasonably foreseeable future actions on or in the vicinity of the refuge. For example, we plan to continue to coordinate with partners to promote common goals, such as improving water quality in the James River, providing environmental education opportunities, and conducting research. Given these considerations, we do not foresee any of these coordinated activities rising to the level of a significant cumulative effect on the environment.

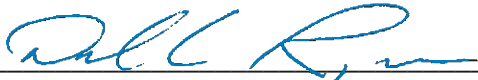
Effects on scientific, cultural, or historical resources—We have developed actions that would improve our knowledge and understanding of the refuge’s resources through scientific investigations, as well as benefit the refuge’s archaeological, historical, and cultural resources. Goals 1 and 2 list strategies for conducting compatible research, and inventory and monitoring projects in support of refuge goals and objectives. Additionally, goal 3 in the final CCP specifically identifies actions to protect the refuge’s cultural and historical resources. We submitted our plan for review by the SHPO. They responded that our plan adequately characterizes the known and potential for cultural resources on the refuge. The SHPO encouraged us to continue consultation to ensure compliance with section 106 of the National Historic Preservation Act (NHPA) and other cultural resource laws in advance of implementing ground-disturbing activities. Although there would be some risk that visitors could damage or disturb cultural resources on the refuge, these risks would be reduced by limiting public access to designated trails and areas only. We would couple that protection with increased outreach, education, and interpretation of those resources and the importance of conserving them. Given these considerations, we do not anticipate any significant effects on scientific, cultural, or historical resources.

Effects on Endangered Species Act (ESA)-listed species and habitats—We have completed a consultation with our Ecological Services Virginia Field Office under section 7 of the ESA. Their endangered species specialist has concurred that the actions planned in the final CCP are not likely to adversely affect the federally threatened sensitive joint-vetch, which is the only federally listed species on refuge lands. We also consulted with the National Oceanic and Atmospheric Administration (NOAA) regarding the potential to affect the federally endangered Atlantic sturgeon in the James River and concluded that the actions planned in the final CCP will have no effect on Atlantic sturgeon.

We have designed our management activities to benefit and reduce the potential to adversely impact federally listed species. For example, we would protect sensitive joint-vetch by preserving tidal marsh habitat and restricting public access in areas where the plant is known to occur. Also, we would work with NOAA, our Virginia Fisheries Coordinator’s Office, and other partners to maintain and restore the Atlantic sturgeon, including participating in habitat improvements and monitoring of the species. Given these considerations, we do not anticipate any significant effects on these ESA-listed resources.

Threat of violating any environmental law—Our habitat management actions are designed to benefit the environment. They will comply with all applicable laws, such as the Clean Water Act, Clean Air Act, ESA, and the NHPA. We obtained concurrence that the SHPO was satisfied with the draft CCP and strategies to ensure compliance with NHPA as the CCP is implemented. We obtained concurrence that actions detailed in the draft CCP are consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Management Program regarding the protection of coastal resources and uses, including the Clean Water Act. We consulted with our Ecological Services Virginia Field Office and NOAA to reach our conclusion that implementation of the CCP will have no effect on ESA-listed species or designated critical habitat. Our existing and proposed public hunting opportunities will be consistent with State regulations. Given these considerations, we do not anticipate a threat that the final CCP will violate any environmental law or cause any significant impact on the environment.

Based on this review, we find that implementing alternative B will not have a significant impact on the quality of the human environment in accordance with Section 102(2)(c) of NEPA. Therefore, we have concluded that this Finding of No Significant Impact is appropriate and an Environmental Impact Statement is not required.



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Date

Acting